

ACCESSION NR: AP4012089

S/0020/64/154/002/0369/0371

AUTHORS: Akutin, M.S.; Kovarskaya, B.M.; Shabash, A.N.;  
Konovalova, B.Ye.

TITLE: Pyrolytic method of block copolymer synthesis

SOURCE: AN SSSR. Doklady\*, v.154, no.2, 1964, 369-371

TOPIC TAGS: pyrolytic synthesis, block copolymer, free radical interaction, block copolymer synthesis, SKN 26, ED 15, nitrile rubber-epoxide tar, polyethylene-polyisobutylene mixture

ABSTRACT: The authors have used the interaction of radicals formed during thermal destruction of two or more polymers for the synthesis of block copolymers. It was expected that new types of polymer materials would be formed by recombination of radicals at moderate heating. The interaction of polymers with reactive oligomers and interaction of two polymers had been studied, specifically, the mixture (1:1) of nitrile rubber SKN 26 with epoxide tar ED 15, low pressure polyethylene and tar ED 15, and polyethylene and polyisobutylene (mol. weight 200,000). For thermal destruction, temperatures of 250C and 2200 were

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used for 1 hour. The solubility of one of the components of the mixture before and after heating is given in a table. Infrared spectra of the components and of the product after heating are reproduced in two figures. These data indicate that heating of mixed polymers (in the absence of oxygen) actually results in the production of block copolymers owing to recombination of radicals. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut  
plasticheskikh mass (State Research Institute for  
Plastic Materials).

SUBMITTED: 24Jul63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: CH, MA

NR REF SOV: 003

OTHER: 003

Card 2/2

ACCESSION NR: AP4013332

S/0020/64/154/003/0631/0633

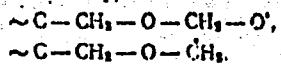
AUTHOR: Blyumenfel'd, A. B.; Neyman, M. B.; Kovarskaya, B. M.

TITLE: Thermal degradation of polyformaldehyde

SOURCE: AN SSSR: Doklady\*, v. 154, no. 3, 1964, 631-633

TOPIC TAGS: polyformaldehyde, thermal degradation, decomposition, free radical mechanism, IR spectrum, mass spectrometry, chromatography

ABSTRACT: A study was made to determine if either of the following free radicals were involved in the thermal decomposition of poly-formaldehyde:



Formaldehyde was separated at 300°C from the thermal decomposition products and the remaining products were analyzed chromatographically by their IR spectra and on the mass spectrometer. Methanol, methyl

Card 1/2

Card 2/2

LITVINENKO, L.V. [Lytvynenko, L.V.]; KOVARKAYA, B.M. [Kovare'ka, B.M.]  
kand. tekhn. nauk; KORNEV, K.A. [Korniev, K.A.], doktor khim.  
nauk

Thermomechanical properties of epoxy resins based on diglycidic  
esters, diglycidic ethers and phthalic anhydride. Khim. prom.  
no.4:10.12 Q.D. '64. (MFA 1881)

PESHEKHONOV A.L.; KAMENSKIY, I.V.; KORSHAK, V.V.; KOVARKAYA, B.M.;  
BELOVA, A.A.

Study of the conditions of the formation of spatial structures  
in furfurole hexamethylenetetramine polymers. Plast. massy no.12:  
9-13 '64. (MIRA 18:3)

L 1139-66 EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b)/EWA(c) IJP(c)/RPL JD/RM

ACCESSION NR: AP5022593

UR/0190/65/007/009/1515/1519  
678.01:54

AUTHORS: Gur'yanova, V. V.; Kovarskaya, B. M.; Trinitskaya, L. A.; Neyman, M. B.; Rozantsev, E. U.

TITLE: On the possibility of initiating the chain oxidation of polymers by nitrogen oxide radicals 1.

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1515-1519

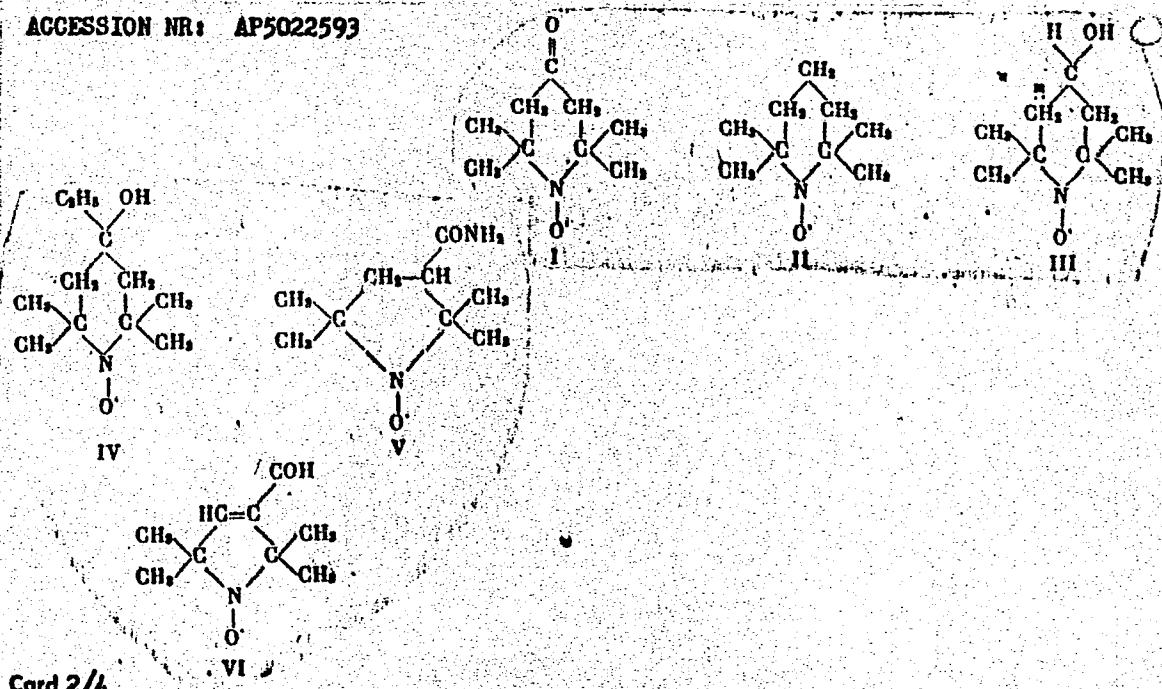
TOPIC TAGS: free radical, EPR, polymerization, hydrazobenzene, free radical polymerization

ABSTRACT: The kinetics, activation energies and preexponential factors for six reactions between six different iminoxyl radicals and hydrazobenzene have been determined. The investigation was undertaken to extend currently available information on the abstraction of nitrogen-bound hydrogen atoms by nitrogen oxide radicals discussed by M. B. Neyman, Yu. G. Mamedova, P. Blenke, and A. L. Buchachenko (Dokl. AN SSSR, 144, 392, 1962). The radicals studied were:

Card 1/4

L 1139-66

ACCESSION NR: AP5022593



Card 2/4

L 1139-66

ACCESSION NR: AP5022593

The rate of reaction was followed by observing the changes in the EPR and UV spectra. The experimental results for hydrazobenzene are shown graphically in Fig. 1 on the Enclosure. Reaction rate constants and preexponential factors for the six different radicals are given in tabular form. A reaction mechanism is proposed. It is concluded that nitrogen oxide radicals are capable of abstracting nitrogen-bound hydrogen, giving rise to an active radical that is capable of initiating oxidation. Orig. art. has: 1 table, 3 graphs, and 3 equations.

5

ASSOCIATION: Institut plasticheskikh mass (Plastics Institute)

4455

SUBMITTED: 24Sep64

ENCL: 01

SUB CODE: OC,  
GC

NO REF Sov: 011

OTHER: 002

Card 3/4

L 1139-66

ACCESSION NR: AP5022593

ENCLOSURE: 01

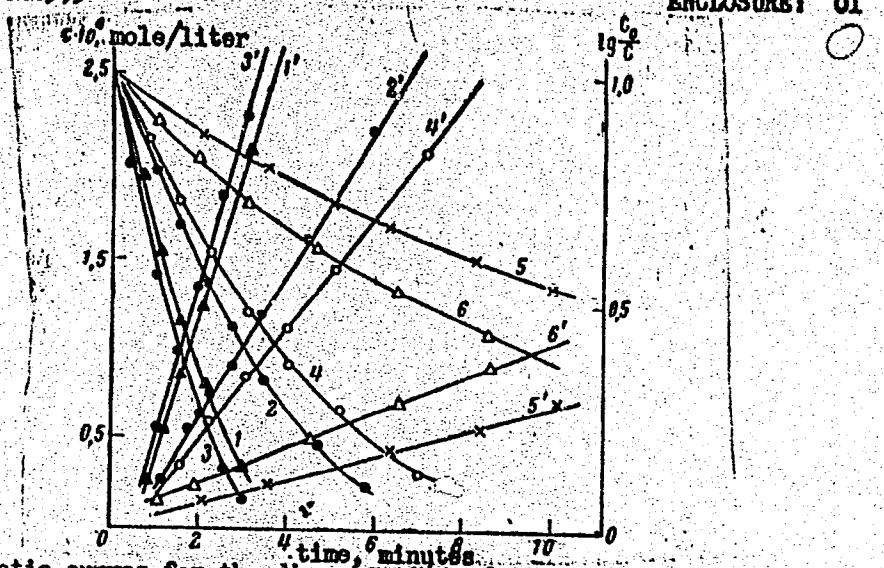


Fig. 1. Kinetic curves for the disappearance of stable radicals in the reaction with hydrazobenzenes. 1- radical I; 2- II; 3- III; 4- IV; 5- V; 6- VI; 1' - 6' disappearance of radicals I - VI represented as  $\log \frac{c}{c_0}$  vs time

Card 4/4

L 2166-66 EWT(m)/EPF(o)/EWP(j)/T/ETC(m) RM/WW  
ACCESSION NR: AP5024508

UR/0191/65/000/010/0042/0044

31

AUTHOR: Gintsberg, E. G.; Chibisova, Ye. I.; Kovarskaya, B. M.

TITLE: Polarographic investigation of the products of thermo-oxidative destruction of polyester resins based on maleic and chlorendic anhydrides and ethylene glycol

SOURCE: Plasticheskiye massy, no. 10, 1965, 42-44

TOPIC TAGS: polyester plastic, polarographic analysis, oxidative degradation, chemical mechanics

ABSTRACT: The products obtained from thermal oxidation of a polyester resin were analysed polarographically to help establish the mechanics of the destructive process. The polyester investigated was based on diethylene glycol, maleic and chlorendic anhydrides (1.1:0.4:0.6 molar ratio), cured with benzoyl peroxide and diethanolamine in styrene (30% styrene in the initial solutions). It was heated at 240C for 1-4 hours under an initial oxygen pressure of 200 mm Hg. Formaldehyde, acetaldehyde, benzaldehyde and maleic acid were identified. No fumar-

Card 1/2

L 2166-66

ACCESSION NR: AP5024508

ic acid was present. Orig. art. has: 4 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: OC, MT

NR REF SOV: 007

OTHER: 002

*Ag*  
Card 2/2

LEVANTOVSKAYA, I.I.; KOVARSKAYA, E.M.; NOVOSELOVA, I.A.; BERLIN, A.A.;  
BASS, S.I.; KLAPOVSKAIA, O.A.; GRACHEVA, D.S.; ANDRIANOVA, N.V.

Stabilization of polyethylene terephthalate. Plast. massy no.2:15-17  
'65.  
(MIRA 18:7)

L 13818-66 EWT(1)/EWP(1) WW/RM  
ACC NR: AP6002481 (A)

SOURCE CODE: UR/0191/66/000/001/0042/0044

AUTHORS: Neyman, M. B.; Kovarskaya, B. M.; Levantovskaya, I. I.; Yazvikova, M. P.

ORG: none

TITLE: Thermo-oxidative degradation of polytetrahydrofurane

SOURCE: Plasticheskiye massy, no. 1, 1966, 42-44

TOPIC TAGS: polymer, oxidative degradation, oxidation, oxidation kinetics

ABSTRACT: To extend the work on the properties of polytetrahydrofurane, published by A. B. Blyumenfel'd, M. B. Neyman, and B. M. Kovarskaya, (DAN SSSR, 154, 631, 1964), the thermo-oxidative degradation of polytetrahydrofurane was studied in the temperature interval of 90–120°C. The experimental technique is that described by V. B. Miller, M. B. Neyman, and Yu. A. Shlyapnikov (Vysokomolek. soyed., 1, 1703, 1959). The kinetics of oxygen absorption, the thermal dependence of the induction period, the autocatalytic factor, the time for the maximum accumulation of hydroperoxides, and the dependence of the induction period on the concentration of a number of antioxidants at 120°C and 200 mm  $\text{O}_2$  pressure were determined. The experimental results are presented graphically (see Fig. 1). It was found that the autocatalytic factor  $\Phi$  and the induction period  $\tau$  are given by

Card 1/2

UDC: 547.722.3:54=126.01:536.495:543.872

L 13818-66

ACC NR: AP6002481

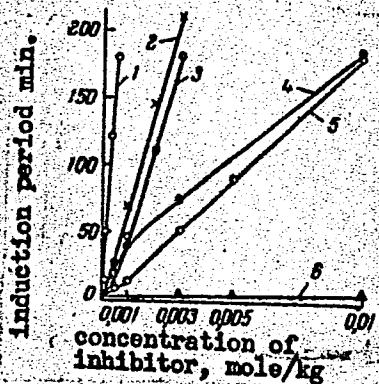


Fig. 1. Dependence of the induction period on the concentration of antioxidant.  
 1 - N-phenyl-N'-cyclohexyl-n-phenylenediamine; 2 - 2,2-methylene-bis-(4-methyl-6-tert-butyl)-phenol (stabilizer 2246); 3 - pyrocatechine; 4 - 2,6-di-tert-butyl-4-methylphenol (ionol); 5 - ionolpyrocatechine-phosphite; 6 - triionolphenyl phosphite (polygard). T = 200°C,  $P\text{O}_2 = 200 \text{ mm}$ .

$$\varphi = a\epsilon - \frac{\gamma_1}{T}$$

$$\epsilon = b\epsilon - \frac{\gamma_2}{T}$$

where  $\gamma_1$  and  $\gamma_2$  are equal to 6000 and 7000 respectively, and a and b are constant. Orig. art. has: 5 graphs and 8 equations.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 004

*QC*  
Card 2/2

L 16199-66

ACCESSION NR: AP5022593

UR/0190/65/007/009/1515/1519  
678.01:54

AUTHORS: Gur'yanova, V. V.; Kovarskaya, B. M.; Krinitinskaya, L. A.; Nozman, M. B.; Rozantsev, E. G.

TITLE: On the possibility of initiating the chain oxidation of polymers by nitrogen oxide radicals

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1515-1519

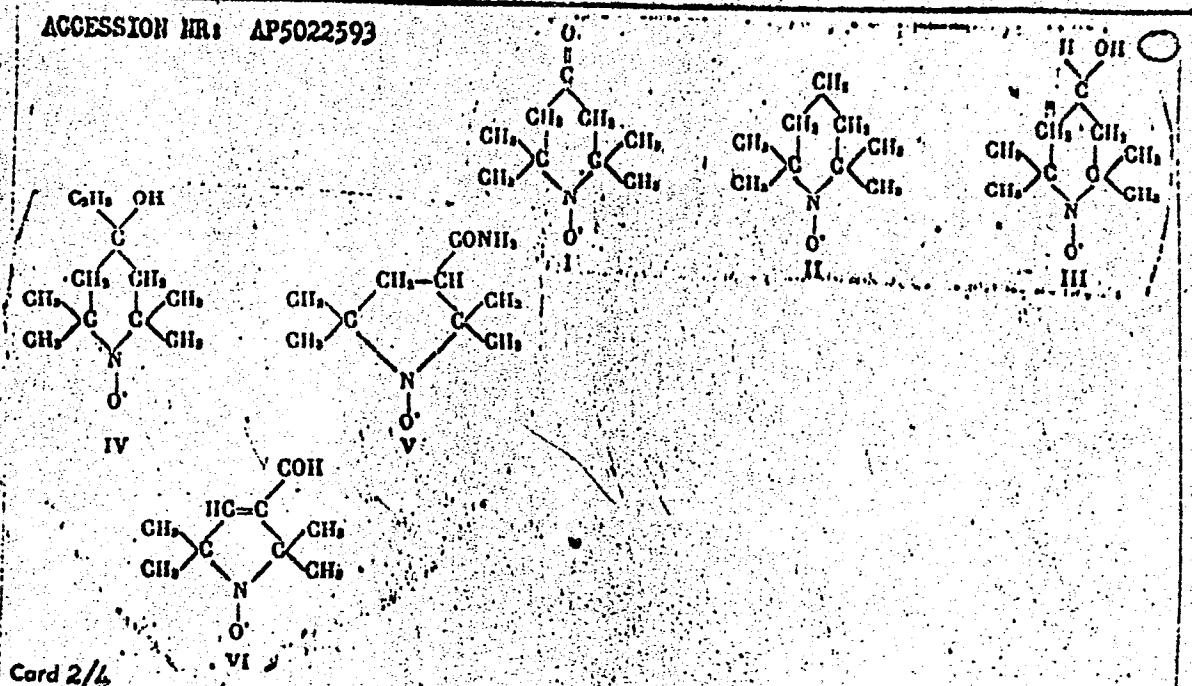
TOPIC TAGS: free radical, EPR, polymerization, hydrazobenzene, free radical polymerization

ABSTRACT: The kinetics, activation energies and preexponential factors for six reactions between six different iminoxyl radicals and hydrazobenzene/have been determined. The investigation was undertaken to extend currently available information on the abstraction of nitrogen-bound hydrogen atoms by nitrogen oxide radicals discussed by M. B. Nozman, Yu. G. Mamedova, P. Blenke, and A. L. Buchachenko (Dokl. AN SSSR, 144, 392, 1962). The radicals studied were:

Card 1/4

L 16199-66

ACCESSION NR: AP5022593



Card 2/4

L 16199-66  
ACCESSION NR: AP5022593

The rate of reaction was followed by observing the changes in the EPR and UV spectra. The experimental results for hydrazobenzene are shown graphically in Fig. 1 on the Enclosure. Reaction rate constants and preexponential factors for the six different radicals are given in tabular form. A reaction mechanism is proposed. It is concluded that nitrogen oxide radicals are capable of abstracting nitrogen-bound hydrogen, giving rise to an active radical that is capable of initiating oxidation. Orig. art. has: 1 table, 3 graphs, and 3 equations.

ASSOCIATION: Institut plasticheskikh mass (Plastics Institute)

SUBMITTED: 24 Sep 64

NO REF Sov: OII

ENCL: OI

OTHER: 002

SUB CODE: 00,  
00

Cord 3/4

L 16199-66

ACCESSION NR: AP5022593

ENCLOSURE: 01

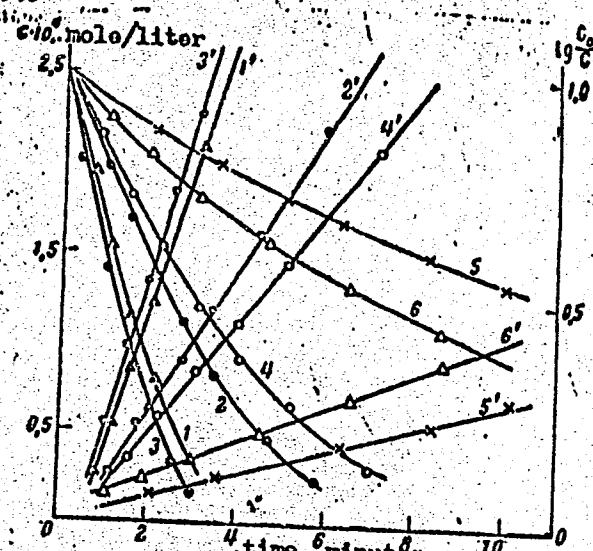


Fig. 1. Kinetic curves for the disappearance of stable radicals in the reaction with hydrazobenzene. 1- radical I; 2- II; 3- III; 4- IV; 5- V; 6- VI; 1'- 6' disappearance of radicals I - VI represented as  $\log C/C_0$  vs time

Card#4

L 37215-66 EWP(j)/EWT(m)/T IJP(c) RM/WW

ACC NR: AP6018127 (A) SOURCE CODE: UR/0191/66/000/006/0040/0042

AUTHOR: Kovarskaya, B. M.; Kolesnikov, G. S.; Levantovskaya, I. I.;  
Smirnova, O. V.; Drakyuk, G. V.; Poletakhina, L S.; Korovina, Ye. V.

41

B

ORG: none

TITLE: Thermo-oxidative degradation of polycarbonates

SOURCE: Plasticheskiye massy, no. 6, 1966, 40-42

TOPIC TAGS: polycarbonate plastic, heat resistance, oxidative degradation, oxidation kinetics, reaction mechanism

ABSTRACT: Polycarbonates, molecular weight of about 30,000, based on 2,2-di-(4-hydroxyphenyl)-propane (PK-1), on 1,1-di-(4-hydroxyphenyl)-cyclohexane (PK-2) and on di-(4-hydroxyphenyl)-phenylmethane (PK-3) were subjected to thermal oxidation in vacuum. Kinetic curves of the thermal oxidations showed PK-1 was most stable and PK-3 the least stable. Energies of activation for the oxidations were calculated: 21.0, 17.6 and 13.0 kcal/mol, respectively. Reaction mechanisms are discussed. Auto-accelerated processes are indicated in the initial period of thermal oxidation of PK-1 and PK-2. Radical-chain oxidation

Card 1/2

UDC: 678.674'41'5.01:620.192.424

L42050-66 E7(m)/EP(j) EM

ACC N# AP6011232 (A) SOURCE CODE: UR/0413/66/000/008/0074/0074

INVENTOR: Gurvich, Ya. A.; Kirpichnikov, P. A.; Zimin, Yu. B.; Kovarskaya, B. M.; Lavastovskaya, I. I.

ORG: none

TITLE: Method of stabilizing polyamides. <sup>15</sup> Class 39, No. 179910 <sup>15</sup>18  
B

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1986, 74

TOPIC TAGS: polyamide, chemical stabilizer, fertilizer

ABSTRACT: An Author Certificate has been issued for a method of stabilizing polyamides by introducing organophosphorus stabilizers into them. N-alkylated anilides of arylphosphorous acids are used to expand the variety of organophosphorus stabilizers. [Translation] [NT]

SUB CODE: SUBM DATE: 11Jun84/

Card 1/1 af

UDC: 678.675.048:547.55.41

L 08799-67 EWT(m)/EWP(j) IJP(c) RM  
ACC NR: AP6030852 (A, N) SOURCE CODE: UR/0191/66/000/009/0042/0045

AUTHOR: Chibisova, Ye. I.; Kovarskaya, B. M.; Pshenitsyna, V. P.; Puzakova, Z. A.;  
Kaganova, Ye. L.

ORG: none

31

TITLE: Degradation of unsaturated polyesters

SOURCE: Plasticheskiye massy, no. 9, 1966, 42-45

TOPIC TAGS: polyester resin, pyrolysis, oxidation, polyester plastic, phthalic anhydride, synthetic material

ABSTRACT: The kinetics of thermal and oxidative degradations of polyesters based on ethylene glycol and maleic anhydride and on dichlorohydrinpentaeurythrite and maleic- and phthalic anhydrides were studied. The kinetics of thermal degradation were studied in the 200-400°C range by following the pressure drop in the system and by IR spectroscopy. Oxidative degradation was studied in the 180-240°C range and at an initial oxygen pressure of 200-500 mm Hg. The low values of the activation energy of thermal degradation in all polyesters indicate that the process proceeds via a complex mechanism. The involvement of the free radical type intermediates in the thermal degradation is suggested. The IR spectra indicate that thermal degradation in polyesters involves the cleavage of the C-O bonds of the ester groups. The IR spectra showed that the

Card 1/2

UDC: 678.019.3 : [678.674'64'522'448+  
+678.674'522'448'420]

L 08799-67

ACC NR: AP6030852

O  
products of the oxidative degradation of the polyesters contain acetaldehyde, formaldehyde, benzaldehyde, and maleic anhydride. It is concluded that the oxidative degradation mechanism in polyesters involves an attack of oxygen on the  $\alpha$ -carbon of the styrene-group and the subsequent formation of hydroperoxide-type intermediates. Unsaturated compounds were also detected in the products of oxidative degradation of the polyesters. Orig. art. has: 7 figures and 1 table.

SUB CODE: 07// SUBM DATE: 00/ ORIG REF: 003/ OTH REF: 005  
///

Card 2/2 nst

SMIRNOVA, A. M.; RAYKOVA, T. V.; BRODOVA, E. I.; KOVARKAYA, L. B.

Effect of the dispersity of filler and its grinding time on  
the physicomechanical properties of polymers. Koll. zhur. 24  
no.6:742-748 N-D '62. (MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

(Polymers) (Colloids)

17.1450  
158330

32357  
3/191/62/000/001/001/006  
B145/B110

AUTHORS: Losev, I. P., Smirnova, O. V., Kovarskaya, L. B., Poyenaru, V.

TITLE: Synthesis and investigation of copolymerization products of salts of  $\alpha$ -chloro acrylic acid with other acryl derivatives

PERIODICAL: Plasticheskiye massy, no. 1, 1962, 3-8

TEXT: The Pb, Ni, Co, and Cd salts of  $\alpha$ -chloro acrylic acid (I) as well as polymers on this basis were synthesized. The lead salt was produced from  $Pb(OH)_2$  and I in aqueous solution ( $100^{\circ}C$ ) (yield 89.1%) and by reaction of  $Pb(Ac)_2$  with I in ethereal solution ( $30^{\circ}$ ) (85%). It is insoluble in water, acetone, benzene, dichloro ethane, ether, and alcohol but soluble in dioxane and hot I, and has a crystalline structure. The Co, Ni, and Cd salts were prepared from the corresponding diacetates and from I in yields of 96, 97.5, and 96%, respectively. All four salts have no melting point, but start decomposing at  $200-220^{\circ}C$ . Elementary analysis provided the formula  $C_6H_4Cl_2O_4Me$  (Me = Ni, Co, Cd). Addition of 0.2% Pb salt and 0.2% I during the polymerization of the isobutyl ester of I in the presence of benzoyl peroxide at  $70^{\circ}C$  increases the thermal stability from 90 to  $160^{\circ}C$ . The Card 1/3 X

32357  
S/191/62/000/001/001/006  
B145/B110

Synthesis and investigation ...

copolymerizate is transparent and colorless, has a comparatively small low-molecular portion and a low polydispersity. Copolymerizates obtained from 95% methyl methacrylate, 4.2% I, 0.3% Me salt (Me = Ni, Co, Cd) of I, and 0.5% benzoyl peroxide at 60 to 65°C and by ultraviolet irradiation are glassy materials which do not melt, begin to decompose at 200-260°C, and the thermal stability of which is higher by 70-90°C than that of polymethyl methacrylate alone. The polymerizates are soluble in most organic solvents and concentrated acids, swell in dilute acids and lyes and also in concentrated HNO<sub>3</sub>, and partially hydrolyze in boiling water. For Me = Co, Brinell hardness and specific gravity are 17.7 and 1.04 g/cm<sup>3</sup>, respectively; for Me = Ni, 18.7 and 1.044 g/cm<sup>3</sup>, respectively; and for Me = Cd, 22.7 and 1.35 g/cm<sup>3</sup>, respectively. The infrared spectrum of the copolymerizate with Co has bands which are characteristic of CH<sub>3</sub> and COOH groups. The Debye pattern indicated an amorphous structure. 1.5 mm thick samples of the polymerizate are impermeable to ultraviolet light of 240-400 m $\mu$ . If the reaction mixture is not irradiated with ultraviolet light during the polymerization process, impermeability to ultraviolet light only exists from 240 to 300 m $\mu$ . Consequently, the copolymerizate with Co salt of I is suitable for the production of ultraviolet filters.

Card 2/3

43803

S/069/62/024/006/008/009  
B101/B180

112321  
AUTHORS:

Smirnova, A. M., Raykova, T. V., Brodova, E. I., Kovarskaya,  
L. B.

TITLE:

Effect of filler dispersity and grinding time on the  
physicomechanical properties of polymers

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 6, 1962, 742-748

TEXT: Thermomechanical curves were plotted for Novolac phenol formaldehyde resin K-18 (K-18), polystyrene, and polyethylene mixed with various quantities of iron powder with dispersity between 1 and 17 m<sup>2</sup>/g. Results: Even small additions (30%) of coarse iron powder accelerate the setting of Novolac. With large additions (70%) the material loses its plasticity, becoming elastically solid and thermally stable as a result of structuralization. The effect of the filler increases with dispersity. In polyethylene the flow point is only raised by large additions (80%). Structuralized polyethylene remains highly elastic above the melting point of pure polyethylene. With 90% addition the material loses its plasticity and the structure is more ordered. Increased dispersity has

Card 1/2

SMIRNOVA, A.M.; KOVARSKAYA, L.B.; RAYKOVA, T.V.; TOPOROV, Yu.P.

Effect of the shape of iron powder particles as fillers on the structural and mechanical properties of filled polyethylene. Koll. zhur. 25 no.6:683-688 N-D '63. (MIRA 17:1)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

KOVARSKAYA, M.I.

Leningrad scientific and practical conference of teachers of chemistry.  
Khim.v shkole no.4:78-79 Jl-Ag '53. (MLRA 6:8)  
(Leningrad--Chemistry--Study and teaching) (Study and teaching--  
Chemistry--Leningrad)

KOVARSKAYA, M.I.; SHATUNOVA, T.V.; VANCHENKO, A.S.

Scientific and applied conference of the Leningrad teachers of chemistry. Khim. v shkole 9 no.5:78-79 S-0 '54. (NIRA 7:9)  
(Chemistry--Study and teaching)

KOVARSKAYA, M.I. (Leningrad); FILATOV, I.G. (Moskva).

"A scientific and popular book on halogens" by B. Rozen. Reviewed by  
M.I. Kovarskaia and I.G. Filatov. Khim.v shkole 12 no.4:72-73 Jl-Ag  
'57. (Halogens) (Rozen, B.)

LIFSHITS, I.I.; KOVARSKAYA, N.Ye.

Method of determining fibrous dust in the air by Kouzov's dust  
extractor. Gig. i san. 21 no.9:92-93 S '56. (MLRA 9:10)

1. Iz promyshlennogo otdeleniya laboratorii sanitarno-epidemiologicheskoy stantsii Nevskogo rayona Leningrada.  
(AIR--POLUTION) (DUST)

SLOBODSKOY, V.H., student v kursa (Leningrad); KOVARSKAYA, R.L., student  
v kursa (Leningrad)

Changes in some indexes of water-salt metabolism in the body under  
the influence of the adrenocorticotrophic hormone (ACTH). Probl.  
endokr. i gorm. 2 no.2:67-71 Mr-Ap '56. (MLRA 9:10)

1. Iz fakul'tetskoy terapeuticheskoy kliniki I Leningradskogo medi-  
tsinskogo instituta. imeni akad. I.P.Pavlova (zav. kafedry - prof.  
T.S.Istamanova)  
(ACTH, eff.  
on water & mineral metab.)  
(WATER, metab.  
eff. of ACTH)

BARANCHUK, Ye.I.; KOVARKAYA, Ye.L.

Moment of a biphasic asynchronous motor controlled by amplitude modulated voltage. Izv. vys. ucheb. zav.; prib. 6 no.5:  
(MIRA 16:11)  
41-50 '63.

1. Leningradskiy mekhanicheskiy institut.

BARANCHUK, Yefim Isaakovich, kand. tekhn. nauk, dotsent; KOVARSKAYA,  
Yevgeniya L'vovna

Characteristics of two-phase asynchronous motors with a magnetic  
amplifier feed. Izv. vys. ucheb. zav.; elekromekh. 6 no.10:  
1230-1234 '63. (MIRA 17:1)

1. Leningradskiy mekhanicheskiy institut (for Baranchuk).

ACCESSION NR: AP4041646

S/0146/64/007/003/0025/0032

AUTHOR: Baranchuk, Ye. I.; Kovarskaya, Ye. L.

TITLE: Application of a method of slow-varying amplitudes to an investigation of  
a-c servo systems

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 3, 1964, 25-32

TOPIC TAGS: servo, ac servo, transfer function, ac servo transfer function

ABSTRACT: A method for determining the transfer functions of a-c servo systems by envelope transforms is developed. The differential equations of the envelopes of AM signals serve as fundamental equations of the servo system. These advantages of the method are claimed: (1) no periodic coefficients in the equations; (2) the simplification of the equations is well substantiated; (3) the differential equations are reduced to linear or linearized equations with constant coefficients. The equations are set up for an a-c system comprising a 2-phase

Card 1/2

ACCESSION NR: AP4041646

hollow-rotor induction motor, two modulators, carrier-frequency stabilizing circuits, and an inertial amplifier. The formula developed for the transfer

function of the system is:  $k(p) = \frac{\theta_{px}(p)}{\theta_{ex}(p)} = \frac{a_M W_1(p) + b_M W_2(p)}{1 + a_M W_1(p) + b_M W_2(p)}$ ; for the transfer

function of the error signal:  $k_e(p) = \frac{\epsilon(p)}{\theta_{ex}(p)} = \frac{1}{1 + a_M W_1(p) + b_M W_2(p)}$ . Stability conditions

for the case of supplying the motor control winding from a transistorized power amplifier are determined; the effect of the amplifier internal impedance and other system parameters is studied. Application of the method is illustrated by an example with an ADP-123B motor. Orig. art. has: 2 figures and 20 formulas.

ASSOCIATION: Leningradskiy mekhanicheskiy institut (Leningrad Mechanical Institute)

SUBMITTED: 15 May 63

ENCL: 00

SUB CODE: IE

NO REF SOV: 008

OTHER: 001

Card 2/2

I 4081-66 EWT(1)/T IJP(c) G6

ACC NR: AP5025797

SOURCE CODE: UR/0363/65/001/009/1588/1589

AUTHOR: Kozina, G. S.; Kovarskaya, Ye. S.; Salamatin, Ye. P.

Y4,5  
Y4,5

44,55

3/  
B

ORG: none

TITLE: Effect of charge compensating Na ions on the distribution coefficient of neodymium in CaWO<sub>4</sub> single crystals grown by the Czochralski method

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 9, 1965, 1588-1589

TOPIC TAGS: tungstate, calcium tungstate, neodymium, single crystal growing

ABSTRACT: The growing of CaWO<sub>4</sub>:Nd<sup>3+</sup> single crystals has been studied. It is noted that for practical applications the concentration of activator centers in these crystals should be high. To increase this concentration, Na<sup>+</sup> ions were added to the melt. The experiments were conducted using various amounts of CaWO<sub>4</sub>, Nd<sub>2</sub>O<sub>3</sub>, and Na<sub>2</sub>WO<sub>4</sub> as starting materials. The dependence of neodymium concentration on the Na:Nd ratio was established. The mixtures were melted in Rh or Ir crucibles. The pulling rate was 10 mm/hr, the rotation velocity was 25 rpm, and the crystallization temperature was 1560–1640°C. The study resulted in growing mixed CaWO<sub>4</sub>-Na<sub>2</sub>WO<sub>4</sub> single crystals activated with 0.25 to 3 at% Nd ions using Na/Nd ratios of 4, 8, 15, and 20 in the starting mixture. The results of the study given in Figs. 1 and 2 indicate that

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UDC: 546.41'786.548.55

L 4081-66

ACC NR: AF5025797

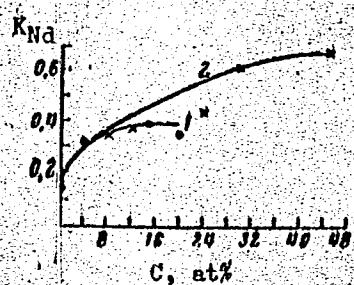


Fig. 1. Dependence of the distribution coefficient of neodymium on the concentration of sodium in the melt. Neodymium content in the melt:

1 - 1 at%; 2 - 2-3 at%.

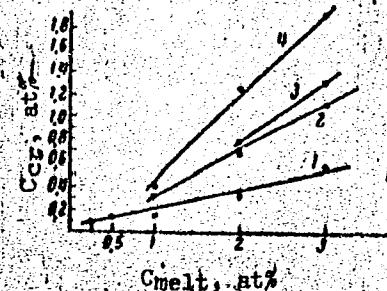


Fig. 2. Dependence of the neodymium concentration in the crystal ( $C_{cr}$ ) on its concentration in the melt ( $C_{melt}$ ). Na/Nd ratios:

1 - 0; 2 - 4; 3 - 8; 4 - 15.

Card 2/3.

L 4081-66

ACC NR: AP5025797

addition of Na ions to the charge considerably increases the distribution coefficient, hence the concentration of activator centers in the crystals. Orig. art. has: 2 figures and 1 table. [BO]

SUB CODE: SS, IC/ SUBM DATE: 09Apr65/ ORIG REF: 000/ OTH REF: 001/ ATD PRESS: 9127

GNK

Card 3/3

L 1123-66 EWT(1) IJP(c)  
ACCESSION NR: AP5021145

UR/0386/65/002/001/0027/0030

AUTHOR: Bakumenko, V. L.; Vlasov, A. N.; Kovarskaya, Ye. S.; Kozina, G. S.;  
Favorin, V. N.

TITLE: Step excitation of fluorescence in Er<sup>3+</sup>-activated CaWO<sub>4</sub>  
SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.  
Prilozheniya, v. 2, no. 1, 1965, 27-30

TOPIC TAGS: quantum counter, infrared quantum counter, quantum action, fluorescence,  
erbium doped oxide, erbium, radiation summation

ABSTRACT: Infrared quantum counter action has been discovered in Er<sup>3+</sup>-doped  
(0.75%) CaWO<sub>4</sub> similar to that recently described by Brown and Shand in Er<sup>3+</sup>-doped  
fluoride lattices (M. R. Brown, W. A. Shand, Phys. Rev. Lett., 12, 367, 1964).  
Fluorescence appeared at wavelengths of about 543 mu when the wavelength of the  
first exciting flux corresponded to 1.5 mu and that of the second to 710-850 mu.  
The effect can be produced only by the simultaneous application of the two fluxes.  
The same action was observed by the authors in Er<sup>3+</sup>-doped (0.5%) PbMoO<sub>4</sub>. According  
to the authors the effect may lead to the transformation of infrared radiation into  
visible light. Orig. art. has: 2 figures. [ZL]

Card 1/2

KOVARSKY, A.G.; MEDOKS, T.S.; ZHDANOV, V.M., prof., red.; KHRISTOV,  
L.N., red.; ZAKHAROVA, A.I., tekhn. red.

[Collection of official materials relating to laboratory work]  
Sbornik ofitsial'nykh materialov po laboratornomu delu. Moskva,  
Medgiz. Book 2. [Manual for technicians in laboratories and  
sanitation and epidemiological stations, and for sanitation  
doctors and epidemiologists] V pomoshch' rabotnikam laboratorii,  
sanitarno-epidemiologicheskikh stantsii, sanitarnomu vrachu,  
vrachu-epidemiologu. 1961. 967 p. (MIRA 15:2)  
(MEDICAL LABORATORIES) (BIOLOGICAL LABORATORIES)  
(CHEMICAL LABORATORIES)

KOVARSKIY, A.G.; MEDOKS, T.S.; Prinimali uchastiye: GLEBOVA, L.F.;  
SMIRNOV, S.M.; YANIN, L.V.; ZHDANOV, V.M., prof., red.;  
CHRISTOV, L.N., red.; KWAKNIN, M.T., tekhn. red.

[Collection of official materials relating to laboratory work]  
Sbornik ofitsial'nykh materialov po laboratornomu delu. Mo-  
skva, Medgiz. Book 1. [Manual for laboratory doctors, sanita-  
tion doctors, and epidemiologists] V pomoshch' vracham-  
laborantam, sanitarnym vracham i vracham-epidemiologam. 1961.  
(MIRA 15:2)  
462 p.

(MEDICAL LABORATORIES) (BIOLOGICAL LABORATORIES)  
(CHEMICAL LABORATORIES)

KOVARSKY, ALEKSANDR IL'ICH

POLYAKOV, Georgiy Yevgen'yevich; KOVARSKY, Aleksandr Il'ich; KOPTAVSKIY,  
D.Ye., redaktor; KUZ'MIN, D.G., tekhnicheskij redaktor

[Practical manual for training electricians in the installation and  
servicing of industrial electrical equipment] Metodicheskoe posobie  
dlia obuchenija v remeslennykh uchilishchakh elektromonterov po  
montazhu i ekspluatatsii promyshlennogo elektrooborudovaniia.  
Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1957. 115 p.  
(Electric engineering) (MLRA 10:10)

Kovarskiy, A.F.

POLYAKOV, Georgiy Yevgen'yevich; KOVARSKIY, Aleksandr Il'ich; REYNBERG,  
Yuriy Lvovich, nauchnyy red.; KOPTEVSKIY, D.Ya., red.; SUSHKEVICH,  
V.I., tekhn.red.

[Assembling and operating industrial electric equipment] Montazh  
i ekspluatatsiya promyshlennogo elektrooborudovaniia. Moskva,  
Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1957. 253 p.  
(Electric engineering) (MIRA 11:3)

BRAYNIN, Teodor L'vovich, inzh.; IVANOV, Viktor Viktorovich, inzh.;  
KOVARSKIY, A.I., nauchnyy red.; DEMINA, G.A., red.; RAKOV,  
S.I., tekhn.red.

[Installation and assembly of lighting and power networks]  
Ustroistvo i montazh osvetitel'nykh i silovykh setei. Moskva,  
Vses.uchebno-pedagog.izd-vo Trudrezervizdat, 1959. 253 p.  
(MIRA 13:3)

(Electric networks)

BRISKIN, Leonid Yakovlevich; KOVARSKIY, A.I., nauchnyy red.; DEMINA,  
G.A., red.; BEREZOVSKAYA, A.L., red.; RAKOV, S.I., tekhn. red.

[Assembly and operation of electric equipment for use in construction] Montazh i ekspluatatsiya elektrooborudovaniia na stroitel'-  
stve. Moskva, Vses.uchebno-pedagog.izd-vo Trudorezervizdat, 1958.  
307 p.

(MIRA 14:12)

(Building--Electric equipment)

KIREYEV, Mikhail Ivanovich; KOVARSKIY, Aleksandr Il'ich; YEGOROV,  
G.P., nauchnyy red.; RYCHEK, T.I., red.; PERSON, M.N.,  
tekhn.red.

[Construction and operation of electric power plants, electric  
substations, and electric power transmission lines] Montazh i  
ekspluatatsiya elektricheskikh stantsii, podstantsii i linii  
peredach. Moskva, Vses.uchebno-pedagog.izd-vo Proftekhizdat,  
1960. 422 p.

(Electric power plants) (Electric power distribution)

YEGOROV, Grigoriy Pavlovich; KOVARSKIY, Aleksandr Il'ich; MASANOV,  
N.F., nauchnyy red.; YAKUBOVICH, I.L., red.; TOKER, A.M.,  
tekhn. red.

[Design, installation, operation, and repair of industrial  
electric units] Ustroistvo, montazh, ekspluatatsiya i remont  
promyshlennyykh elektroustanovok. Moskva, Proftekhizdat, 1961.  
526 p. (MIRA 15:7)

(Electric engineering)

POLYAKOV, Georgiy Yevgen'yevich; KOVARSKIY, Aleksandr Il'ich;  
REYNBERG, Yu.L., nauchnyy red.; SEMENENKOVA, L.A.,  
red.; PERSON, M.N., tekhn. red.

[A methodological manual for training electricians in installation operations and use of the electrical equipment of industrial enterprises] Metodicheskoe posobie dlia obucheniiia elektromonterov po montazhu i ekspluatatsii elektrooborudovaniia promyshlennykh predpriiatii. 2., perer. izd. Moskva,  
Proftekhnizdat, 1961. 158 p. (MIRA 15:11)  
(Electric wiring)

KIREYEV, Mikhail Ivanovich; KOVARSKIY, Aleksandr Il'ich; MUSAELYAN,  
E.S., nauchn. red.; LYAUER, S.G., nauchn. red.; SHUMILOVA,  
Ye.M., red.; TOKER, A. M., tekhn.red.

[Installation and operation of the electrical equipment of  
electric-power plants, substations, and electric power  
transmission lines] Montazh i ekspluatatsiya elektrooborudo-  
vaniia stantsii, podstantsii i linii elektroperedachi. 2. issl.  
perer. i dop. Moskva, Proftekhnizdat, 1963. 414 p.  
(MIRA 16:1d)

(Electric power distribution)

POLYAKOV, Georgiy Yevgen'yevich; KOVARSKIY, Aleksandr Il'ich;  
REYNBERG, Yu.L., nauchn. red.; MUPKINA, V.G., red.

[Industrial training of electricians in the installation  
and operation of electrical equipment of industrial  
enterprises] Proizvodstvennoe obuchenie elektromonterov  
po montazhu i ekspluatatsii elektrooborudovaniia pro-  
myshlennnykh predpriiatii. Izd.3. Moskva, Proftekhnizdat,  
1963. 132 p. (MIRA 17:5)

POLYAKOV, Georgiy Yevgen'yevich; KOVARSKIY, Aleksandr Il'ich;  
MASANOV, N.F., nauchn. red.; SHUMILOVA, Ye.M., red.

[Installation and operation of industrial electrical  
equipment] Montazh i ekspluatatsiya promyshlennogo elek-  
trooborudovaniia. Izd.3., perer. i dop. Moskva, Vys-  
shaia shkola, 1964. 339 p. (MIRA 17:6)

KOVARSKIY, A.L., tekhnik

Self-start network of 380 v. electric motors. Prom.energ. 17  
no.5:11-12 My '62. (MIRA 15:5)  
(Electric motors)

KOVARSKIY, A.V., aspirant

Use of semiautomatic flat knitting machines for the manufacture  
of knitwear. Tekst.prom. 22 no.8:52-54 Ag '62. (MIRA 15:8)

1. Kafedra "Tekhnologiya trikotazhnogo proizvodstva" Moskovskogo  
tekstil'nogo instituta.  
(Knitting machines)

KOVARSKIY, A.V., aspirant

Modern fashioning mechanisms for the automatic flat rib knitting machines. Tekst.prom. 23 no.5:16-20 My '63. (MIRA 16:5)

1. Kafedra "Tekhnologiya trikotazhnogo proizvodstva" Moskovskogo tekstil'nogo instituta.  
(Knitting machines)

KOVARSKIY, A.V., aspirant

Increase of labor productivity in the operation of flat rib-stitch  
knitting machines. Tekst.prom. 23 no.8:15-20 Ag '63.

(MIRA 16:9)

1. Moskovskiy tekstil'nyy institut.

(Knitting machines)

KOVARSKIY, A.V., inzh.

Modern designs of mechanisms for automatic increasing and decreasing of the number of needles on flat rib knitting machines. Izv. vys. ucheb. zav.; tekhn. leg. prom. no.2: 119-129 '63. (MIRA 16:10)

1. Moskovskiy tekstil'nyy institut. Rekomendovana kafedroy tekhnologii trikotazha.

KOVARSKIY, A.V., inzh., aspirant

Possibility of a complete automation of flat purl knitting  
machines. Tekst. prom. 24 no.10:57-60 O '64.

(MIRA 17:12)

1. Kafedra trikotazhnogo proizvodstva Moskovskogo tekstil'nogo  
instituta.

POTEMKIN, D.M., kand. tekhn. nauk; KOVARSKIY, A.V., inzh.

[Development of the design of knitting machines] Razvitiye  
konstruktsii trikotazhnykh mashin. Moskva, AN SSSR, 1965.  
128 p. (MIRA 18:5)

KOVARSKIY, A. Ye., UCHKOVSKIY, V.G.

For high yields of maize in Moldavia.

Gosizdat Moldavii, 1954.

KOVARSKIY, A.Ye., prof.doktor sel'skokhozyaystvennykh nauk; GULYAYEVA, Ye.M.,  
assistant kafedry darvinizma.

Mentor effect of alien pollen in self-pollinated corn. Trudy Kish.  
Sel'khoz. inst. 3:127-135 '55. (MIRA 11:7)  
(Corn breeding)

KOVARSKIY, A.Ye., prof., doktor sel'skokhozyaystvennykh nauk; KOGAN, F.D.,  
starshiy spetsialist

Role of cotyledons in interspecific and intergeneric vegetative  
hybridization of pulse crops. Trudy Kish. sel'khoz. inst. 3:141-162  
'55. (MIRA 11:7)

(Legumes) (Grafting)

CATEGORY : 105A  
CULTIVATED PLANTS. Grains. Leguminous Grains,  
Tropical Cereals.

REF. JOURN. : Ref. Znat.-Biologich., No. 5, 1959, No. 20248

AUTHOR : Kovarskiy, A.Ye.

INSTIT. : Not given

TITLE : Innovations in Corn Selection and Hybridization According to Findings of the Kishinev Experimental Station.

ORIG. PUBL. : V. sb.: Kul'tura kukuruzy v SSSR. M., "Sov. nauka", 1957, 81-100

ABSTRACT : A new method is proposed, called the "Kishinev" Technique of self-pollinating corn which consists of lightly twisting the stem of the panicle base and bringing it closer to the pistillate fibers which have not yet emerged. This method was highly effective in 1955, radically boosting the productivity of labor and the percentage of seed setting. The principles of isolating corn patches by distance are discussed in regard to producing

FORM: 1/4

COUNTRY :

SOURCE : Cultivated Plants.

ADS. JOURN.: Vest Zhur-Biologiya, No.5, 1959, No. 20248

AUTHOR :

INSTIT. :

PEOPLE :

ORIG. PUB.:

ABSTRACT : hybrid seeds. It is recommended to isolate the hybridization patches by planting a fence of sunflowers at short distances. To speed up the inspection of hybrid corn combinations a method has been developed of preliminary inspection on the basis of the seedlings and shoots (individual corn combinations and varieties are evaluated during the winter period by sprouting and the shoots). Data are presented on findings of investigations :

CARD :

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ENTRY :  
CATEGORY : Cultivated Plants.

REF. JOUR : Ref. Zhur. "Biologiya, No. 5, 1959, No. 20248

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB.:

ABSTRACT : bearing on the following problems: the pollen  
mentor in the self-pollination of corn and  
its value in selection and hybridization,  
the principle of selection of seeds and its  
significance in selection and hybridization,  
vegetative hybridization, the utilization of  
local Moldavian varieties for selection and  
hybridization, the production of hybrids  
which do not require pinching of the panicles  
when obtaining hybrid seed, the hybridization

CONT: 3/4

USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur Biol., No 18, 1958, 82305

Author : Kovarskiy A.Ya.

Inst : Kharkov University

Title : News in the Selection and Hybridization of Corn.

Orig Pub : V.Sb.: Vopr. metodiki selektsii pshenitsy i kukuryzy,  
Khar'kov, Un-t, 1957, 171-182

Abstract : The generally accepted method of self-pollination of corn by means of cutting off the male panicles and placing them with the female racemes is laborious and does not guarantee the absolute thoroughness of the work. The author has developed jointly with M.I. Borovskiy a new method of corn pollination consisting of slightly twisting and bending the stem at the base of the panicle; and the panicle draws closer to the

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USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur Biol., No 18, 1958, 82305

pistil filaments which have not yet emerged. The panicle and the female raceme are placed under a parchment insulator having the shape of a short arm (50 x 15 centimeters). According to the data presented the method indicated permitted an increase in the percentage of seed setting from 58.7 to 96% under the conditions of 1955, and an increase in labor efficiency during self-pollination. Instead of the usually practiced isolation of corn by distance (200 meters), the author recommends the separation of corn plots from each other by sheltering plantings of tall varieties of sunflower or hemp at the distances of 15-25 meters. For the purpose of a quicker rejection of the unsuccessful combinations of corn crossbreeding, a method of preliminary rejection from the sprots is recommended. A description of this method is given. This permits evaluation of the obtained material a year earlier. In prospect is also the evaluation of

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M

USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur Biol., No 18, 1958, 82305

corn hybrids by the intensity and the degree of differentiation during the 5-7 leaves phase of the growth cone of the main stem and of axil buds in plants grown in the autumn-winter period under artificial conditions. The problem of a pollen mentor in corn self-pollination and its significance in the selection and hybridization of corn is examined. -- YuL. Guzhev

Card 3/3

Country : USSR

Category : Cultivated Plants. Cereals. Leguminous Plants.  
Tropical Cereals. M

Abs Jour : RZhBiol., No 6, 1959, No 24827

Author : Kovarskiy, A.

Inst : Kishinev Agricultural Institute.

Title : New in Biology Pollination and Fecundation of  
Corn and Perspectives of Its Selection and Hy-  
bridization.

Orig Pub : Zemledeliye i zhivotnovodstvo Moldavii, 1957,  
No 12, 2-18

Abstract : A review of the literature on corn biology and  
genetics; a brief resume of Kishinev Agricultu-  
ral Institute's investigation on self-pollina-  
tion of corn, conducted in 1955-1957; recommen-  
dations for the raising of high-yield varieties  
and hybrids of corn.

Card : 1/1

*Kovarskiy, A.Y.*

KOVARSKIY, A.Y., doktor sel'skokhozyaystvennykh nauk; LYSIKOV, V.N., kand.  
sel'skokhozyaystvennykh nauk.

First collection of articles ("Research work in agricultural colleges"  
by A.Y. Golikov and A.N. Litvinenko. Reviewed by A.E. Kovarskii and  
V.N. Lysikov). Zemledelie 5 no.11:95-96 N '57. (MLRA 10:11)

1. Kishinevskiy sel'skokhozyaystvennyy institut,  
(Agricultural research)  
(Golikov, A.Y.) (Litvinenko, A.N.)

KOVARSKIY, A.Ye., doktor sel'skokhozyaystvennykh nauk; MATSYUK, L.S., kand.  
sel'skokhozyaystvennykh nauk.

A good handbook on plant culture ("Plant culture" by P.I. Podgornyi.  
Reviewed by A.E. Kovarskii, L.S. Matsuuk). Zemledelie 6 no.7:93-94  
Jl '58. (Field crops) (Podgornyi, P.I.) (MIRA 11:6)

Kovarskiy A. Ye.

AUTHOR: Kosenko, I. Ye. , Candidate of Agricultural Sciences 30-1-33/39

TITLE: The Tasks of Biological Research in the Moldavian SSR  
(Zadachi biologicheskikh issledovaniy v Moldavskoy SSR)  
Out-of-Town Session of the Department of Biological Sciences (Vyyezhnaya sessiya otdeleniya biologicheskikh nauk)

PERIODICAL: Vestnik AN SSSR, 1958, Vol. 28, Nr 1, pp. 125 - 126 (USSR)

ABSTRACT: From September 16, to September 21, 1957 the congress took place in the branch of the AN in the Moldavian SSR, which was organized together with VASKhNIL. The congress was intended to discuss the results of biological research in this field and to give precise information concerning the tasks to be performed in future. It was attended by 400 representatives of the branch of the AN and other scientific factory institutions, as well as by representatives of the Moscow and Leningrad Institutes. The following reports were delivered:  
1) L. S. Matsyuk: The principal results and problems in the development of the Biological Sciences in the Moldavian SSR.  
2) A. Ye. Kovarskiy: Innovation in the selection and the hybridization of maize.

Card 1/3

The Tasks of Biological Research in the Moldavian SSR.  
Out-of-Town Session of the Department of Biological Sciences

30-1-33/39

soils, and to take measures for the further development of work tending to explain the origin of the soils of Moldavia, to find new ways of increasing the yield of soils and to struggle against erosion, etc. Furthermore, the necessity of the research of the flora was stressed, as well as of work connected with introduction and acclimatization, on the investigation of spore plants and with experimental botanics. The following suggestions were further made: to map agrochemical charts of the soils of fields with successive crops and many years of planting; the investigation of the micro-organisms of various types of soil, the supplying with organic and mineral fertilizers and microelements, the increase of theoretical investigations on plant physiology and biochemistry; the determination of measures for the struggle against diseases and plant vermins, the increased treatment of physiological problems in order to increase the productivity of agricultural animals, and, lastly an increased introduction of scientific achievements in practice.

AVAILABLE: Library of Congress

Card 3/3      1. Biology research-USSR    2. Biology reports-USSR  
*and 2 missing - no additional info.*

GENKEL', P.A., prof., otv. red.; MATSYUK, L.S., kand. sel'khoz. nauk, zam. red.; DIMO, N.A., red. [deceased]; DIKUSAR, I.G., doktor sel'khoz. nauk, red.; YAROSHENKO, M.F., doktor biol. nauk, red.; KOVARSKY, A.Ye., doktor sel'khoz. nauk, red.; ZUBKOV, A.A., doktor med. nauk, red.; PRINTS, Ya.I., doktor biol. nauk, red.; GEYDEMAN, T.S., kand. biol. nauk, red.; IVANOV, S.M., kand. biol. nauk, red.; USPENSKIY, G.A., kand. biol. nauk, red.; GERGELEZHJU, A.K., kand. tekhn. nauk, red.; FITOVA, L., red.; KARYAKINA, I., red.; KOCHANOVА, N., red.; TEL'PIS, V., tekhn. red.

[Papers of the United Scientific Session of the Department of Biological Sciences of the Academy of Sciences of the U.S.S.R., the Department of Agriculture of the V.I.Lenin All-Union Academy of Agricultural Sciences and the Moldavian Section of the Academy of Sciences of the U.S.S.R.] Trudy ob"edinennoi nauchnoi sessii: Otdelenie biologicheskikh nauk AN SSSR, Otdelenie zemledeliia VASKhNIL, Moldavskii filial AN SSSR. Kishinev, Kartia Moldoveniaske. Vol.2. 1959. 483 p.  
(MIRA 15:5)

1. Ob"edinennaya nauchnaya sossiya, Kishenev, 1957. Zamestitel' akademika-sekretarya Otdeleniya biologicheskikh nauk Akademii nauk SSSR (for Genkel'). 2. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Dimo).  
(Moldavia--Agricultural research--Congresses)

MATSYUK, L.S., otv. red.; VARTICHAN, I.K., red.; GEYDEMAN, T.S., red.; DIKUSAR, I.G., red.; ZUBKOV, A.A., red.; IVANCHUK, P.K., red.; KOVARSKIV, A.Ye., red.; KOLESNIKOV, S.M., red.; KONSTANTINOV, M.K., red.; MOKHOV, N.A., red.; SAYANOV, V.S., red.; TABUNSHCHIK, F.Z., red.; CHEBOTAR', A.A., red.

[Transactions of the First Conference of Young Moldavian Scientists] Trudy pervoi nauchnoi konferentsii molodykh uchenykh Moldavii, 1958. Kishinev, Gos. izd-vo "Kartia Moldoveniaske", 1960. 390 p. (MIR 15:3)

1. Nauchnaya konferentsiya molodykh uchenykh Moldavii, 1st, 1958.
2. Institut biologii Moldavskogo filiala Akademii nauk SSSR (for Kolesnikov, Chebotar').
3. Institut geologii i poleznykh iskopayemykh Moldavskogo filiala Akademii nauk SSSR (for Sayanov).

(Moldavia--Science--Congresses)

KOVARSKIY, A.Ye., prof., doktor sel'khoz. nauk, zasl. deyatel' nauki i tekhniki, otv. red.; YAROSHENKO, M.F., doktor biol. nauk, zam. otv. red.; VERDEREVSKIY, D.D., doktor sel'khoz. nauk, red.; IRIKHIMOVICH, A.I., doktor biol. nauk, red.; KOLESNIKOV, S.M., kand. biol. nauk, red.; PRINTS, Ya.I., doktor biol. nauk, red.; RYBIN, V.A., doktor biol. nauk, red.; USPENSKIY, G.A., kand. biol. nauk, red.; GULYAYEVA, Ye.M., kand. biol. nauk, otv. red.; KARYAKINA, I.I., red.; MANDEL'BAUM, M.Ye., tekhn. red.

[Transactions of the Darwin Anniversary Conference] Trudy iubileinoi Darvinovskoi konferentsii. Kishinev, Izd-vo "Shtiintsa," 1960. 389 p. (MIRA 15:9)

1. Yubileynaya Darvinovskaya konferentsiya, 1960. 2. Institut biologii Moldavskogo filiala Akademii nauk SSSR i Kishinevskiy sel'skokhozyaystvennyy institut im. M.V.Frunze (for Kovarskiy). 3. Kishinevskiy sel'skokhozyaystvennyy institut im. M.V.Frunze (for Verderevskiy). 4. Institut biologii Moldavskogo filiala Akademii nauk SSSR (for Kolesnikov, Prints, Uspenskiy, Irkhimovich). 5. Botanicheskiy sad Moldavskogo filiala Akademii nauk SSSR (for Rybin).  
(Evolution—Congresses)

GRIMAL'SKIY, V.L., prof.; CHETYRKIN, V.S., prof., red.toma; RUD', G.Ya., kand.sel'skokhoz.nauk, red.; SUBBOTOVICH, A.S., kand.sel'skokhoz. nauk, red.; KOLESNIK, L.V., doktor sel'skokhoz.nauk, red.; SEMENOV, A.N., doktor tekhn.nauk, red.; KOVARSKIY, A.Ye., doktor sel'skokhoz.nauk, red.; FROLOV, N.P., doktor ekonom.nauk, red.; MATSYUK, L.S., kand.sel'skokhoz.nauk, red.; GUSAK, I.V., kand.tekhn.nauk, red.; URSUL, D.T., kand.filos.nauk, red.; LEGAS', I.Ye., kand. istor.nauk, red.; SHEVCHUK, I.P., kand.ekonom.nauk, red.; KACHANOVA, N., red.; TIMOSHENKO, A.G., kand.sel'skokhoz.nauk, zamestitel' red.; SHPANER, V., tekhn.red.

[Bodies of water of the Reut Basin, their hydrobiological conditions and the outlook for their utilization in commercial fishing.]  
Vodoemy basseina reki Reuta, ikh gidrobiologicheskii rezhim i perspektivy rybokhoziaistvennogo ispol'zovaniia. Kishinev, Izd-vo sel'skokhoz. lit-ry, 1962. 191 p. (Kishinev.Sel'skokhoziaistvennyi institut im. M.V.Frunze. Trudy, vol.29). (MIRA 17:2)

KOVARSKII, A.Ye., red.; YAROSHENKO, M.F., red.; GEYDEMAN, T.S.,  
red.; DIKUSAR, I.G., red.; DOROKHOV, L.M., red.; ZUBKOV,  
A.A., red.; PELYAKH, M.A., red.; FURDUY, F.I., red.;  
CHEBOTAR', A.A., red.; CHORIK, F.P., red.; BOLIYEVA, L.,  
red.

[Transactions of the Third Conference of Young Moldavian Scientists] Trudy III nauchnoi konferentsii molodykh uchenykh Moldavii. Kishinev, Kartia moldoveniaske. No.2.[Biological and agricultural sciences] Biologicheskie i sel'skokhoziaistvennye nauki. 1964. 273 p. (MIRA 17:8)

1. Nauchnaya konferentsiya molodykh uchenykh Moldavii, 3d.

KOVARSKIV, A.Ye.; KARYAKINA, I., red.

[Pollination with foreign pollen (mentor effect of the pollen) as a new breeding method] Chuzheopylenie (mentoral'noe vliianie pyl'tsy) kak novyi priem selektsii. Kishinev, Kartia moldoveniaske, 1963. 51 p.

(MIRA 18:7)

KOVARSKIY, A.Ye.

Dissymmetry of morphological characters in crop plants and  
possible ways of using this phenomenon in breeding. Izv. AN  
Mold. SSR no.6:3-5 '63. (MIRA 17:12)

I 25620-66 EWT(1)/EEC(k)-2/EWA(h)

ACC NR: AP6015631

SOURCE CODE: UR/0413/66/000/009/0038

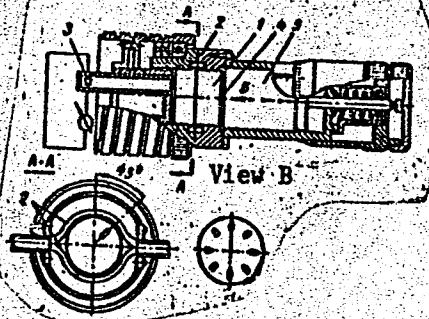
INVENTOR: Kovarskiy, B. I.; Godunov, V. I.

ORG: none

TITLE: Resonance wavemeter for the UHF range. Class 21, No. 181159

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 38

TOPIC TAGS: waveguide element, waveguide frequency, waveguide transmission

ABSTRACT: The UHF resonance wavemeter shown in the figure consists of a tunable cylindrical  $H_{011}$  wave resonator excited by a waveguide splitter which encloses the

1 - resonator for preliminary tuning; 2 - waveguide splitter;  
3 - detector; 4 - coupling dia-phragm; 5 - resonator for pre-cise tuning.

Card 1/2

UDC: 621.317.763

I 25620-66

ACC NR: AP6015631

resonator, and a resonance indicator working in conjunction with a detector. High measurement accuracy is achieved by coupling the  $H_{011}$  resonator to another cylindrical resonator by means of a transverse diaphragm. The second resonator operates on the  $H_{010}$  wave. Its frequency may be independently tuned. Orig. art. has: 1 figure. [BD]

SUB CODE: 14, 09/ SUMB DATE: 28Sep63/ ATD PRESS: 4255

Card 2/2 ✓

KOVARSKIY, F.N., mayor meditsinskoy sluzhby; PETROV, P.P., podpolkovnik  
meditsinskoy sluzhby

Electric model for studying the etiology of infectious disease.  
Voen-med. zhur. no.1:87 Ja '56 (MIRA 10:5)  
(COMMUNICABLE DISEASES,

model for investigation of appearance & transm. of infect.  
dis.) (Rus)

16,8000

S/194/61/000/002/022/039  
D216/D302

AUTHORS: Kovarskiy, G.Ya. and Tel'ksnis, L.A.

TITLE: The evaluation of accuracy with which a random function can be separated by a finite part of a canonical series

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 2, 1961, 35, abstract 2 V271 (V sb. Avtomat. upravleniye, M., AN SSSR, 1960, 307-311)

TEXT: A finite part of a canonical series is used to evaluate the accuracy of dispersion of the output coordinate of any linear system of automatic control under the influence of either a stationary or a non-stationary random disturbance. A nomogram is given which permits the initial evaluation of the number of terms of canonical distribution of random disturbance which would secure a pre-determined accuracy (in the terms of average dispersion of the final term) of representation of the random function. 1 bloc-dia-  
✓  
C

Card 1/2

S/194/61/000/002/022/059  
D216/D302

The evaluation of accuracy...

gram of the calculating arrangement is given as used for determining the dispersion of a sharply cut-off random disturbance,  
3 references.

✓  
C

Card 2/2

KOVARSKIY, I.I., inzh.; NOVIKOV, Yu.N., inzh.

Vibrated reinforced concrete poles for 110 kilovolt overhead  
electric lines. Bet. 1 zhel.-bet. no.10:470-473 O '61.  
(MIRA 14:12)

(Electric lines--Poles)  
(Vibrated concrete)

KOVARSKIY, I.Ye., inzhener.

Using electric metallization techniques in manufacturing nuts.  
Mashinostroitel' no.3:39 Mr '57. (MLRA 10:5)  
(Metal spraying) (Bolts and nuts)

KOVARSKIY, K.Ye., inzh.; GOLINKIN, S.L.; VOLYNSKIY, M.M.

Special features in the construction of a thrust bearing  
with swaying mounts and experience in its operation.

Teploenergetika 11 no.5:57-62 My'64. (MIRA 17:5)

1. Glavnoye upravleniye po mekhanizatsii stroitel'stva  
Gosudarstvennogo proizvodstvennogo komiteta po energetike i  
elektrifikatsii SSSR.

KOVARSKIY, L.

Selecting a labor productivity index for an industrial branch with  
the aid of correlation coefficients. Biul.nauch.inform.: trud i  
zar.plata 3 no.9:7-12 '60. (MIA 13:9)  
(Electric machinery industry--Labor productivity)  
(Correlation (Statistics))

8(6)

SOV/91-59-10-3/29

AUTHORS: Kovarskiy L.G. and Gol'dberg A.E., Engineers

TITLE: Application of Gas Vaporizers and Heat Economizers

PERIODICAL: Energetik, 1959, Nr. 10, pp 7-10, (USSR)

ABSTRACT: At the electric power stations, where the turbines are fully utilized, as well as in industrial boiler installations, it is often expedient to use gas vaporizers or heat economizers for the purpose of lowering down temperatures of outgoing gases. At the present time, there are in Leningrad over 20 electric power stations using such installations; experience has shown that it is practically possible to lower the outgoing gas temperature down to 105° - 130°C. The most moderate working parameters of gas evaporizers (pressure 0.7 at. and temperature 115° - 200°C), and heat economizers (pressure 2-5 at. and temperature 105° - 200°C) do not make any particular claims of materials for manufacturing them. Their building is 2 - 2.5 times less expensive than the construction of increased tail heating surface of boilers. The work of gas vaporizers and heat economizers has been ve-

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SOV/91-59-10-3/29

Application of Gas Vaporizers and Heat Economizers

rified by using different brands of coals, peat, schist and natural gas. In Figs. 1 and 2, diagrams of gas vaporizer are given. The following is a short outline of the advantages of gas vaporizers: a) A relatively small consumption of feeding water (20 to 30 times less than in heat economizers); as a result, less consumption of electric energy required to feed the installation; possibility of using feed pipe lines of a small diameter without applying special pumps; b) Possibility of automation and level regulation; c) Possibility of feeding by chemically pure water; d) Possibility of blowing off the low-potential media from the gas vaporizer, thus decreasing the blowing off rate of the boiler; e) Less working pressure, and, consequently, smaller requirements as regards material. In Figs. 3 and 4, diagrams of the heat economizer are given. Its advantages are: a) Compactness of installation; b) A comparatively small diameter of the heated water pipe line; c) Possibility of a more efficient (by 5° - 10°C) cooling of gases. Gas vaporizers and heat economizers are usually located be-

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Application of Gas Vaporizers and Heat Economizers

hind the boilers; no special bearing constructions are required, and the whole installation is mounted directly on boiler seat. The simplest and most reliable installation for the utilization of outgoing gas heat consists of the following components (Fig. 2): A gas vaporizer in the form of a horizontal barrel with fire-tubes, which is fed by turbine condensation heated in a regenerator above the dew-point. Experience, accumulated in the course of several years, has shown the optimum speed of gases passing through gas vaporizers and heat economizers should amount to 15-22 m/sec. The volume of gas that has passed through the vaporizer is decreased, due to its cooling, by 10% - 20%. Maintenance of gas vaporizers and heat economizers means on the whole, their periodical cleaning and blowing off. There are 1 table and 5 diagrams.

Card 3/3

KOVARSKIY, L.G., inzh.; GOL'DBERG, A.E., inzh.

Cutting openings in the walls of drum boilers and  
collectors. Energetik 8 no.7:13-14 Jl '60.

(MIRA 13:8)

(Gas welding and cutting) (Boilers)

KOVARSKIY, L.G., inzh.

Proper installation of steam-blast cleaning equipment in boilers.  
Elek. sta. 36 no.6:19-20 Je '65. (MIRA 18:7)

KOVARSKIY, L.G., inzh.

Calculation of deflection of blast streams. Energomashinostroenie  
11 no. 9:44-46 S '65. (MIRA 18:10)

KOVARSKIY, L.G., inzh.; MAKAROV, Ye.Ya., tekhnik

Improved metal scaffolding for boilers. Energetik 9 no.8:8-12  
Ag '61. (MIRA 14:8)  
(Boilers) (Scaffolding)

KOVARSKIY, L.G., inzh.; ANDREYEV, A.N., tekhnik

Pneumatic ash removal in boiler cleaning operations. Energetik  
10 no.2:10-13 F '62. (MIRA 15:2)  
(Boilers--Cleaning)

KOVARSKIY, Lev Girshevich; ZENKEVICH, Yu.V., red.

[Protection of boilers from incrustations and soot accumulation] Zashchita parovykh kotlov ot shlakovaniia i zanosa zoloi. Moskva, Izd-vo "Energiia," 1964. 270 p. (MIRA 17:6)

KOVARSKIY, L.Z., ekonomist

Evaluation of activity and comparison of the levels of labor  
productivity at different types of enterprises. Vest elektroprom.  
32 no.9:20-23 S '61. (MIRA 14:8)  
(Electric industries--Accounting)

KOVARSKY, M.

36453. KOVARSKIY, M., TSITOVSKAYA, S., KOROLEVICH, M. I YERKHOVA, V.  
Kariyes i Beremennost'.-Avt: M. Kovarskiy, S. Tsitovskaya, M. Korolevich I V.  
Yerkhova. Stomatologiya, 1949, No. 4, S. 25-28.

SQ: Letopis' Zhurnal'nykh Statey, Vol. 49, Moskva 1949